

# Nurse Training – Infant, Pediatric, Adolescent, Adult Vaccination (Routine, COVID-19)

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Information as of June 2023



- You will get a certificate of completion AFTER completing the post survey for this session.
  - Link to survey is at the end of this session.
- Slides and handouts will be e-mailed to you with your certificate.



As a result of this training, participants will be able to:

- 1. Apply best practices for administering vaccine: Including those steps to follow before, during, and after vaccine administration and when giving multiple injections.
- 2. Use the recommended schedules for routine and COVID-19 vaccinations.
- 3. Conduct steps for preventing vaccine administration errors and what to do when an error occurs.

# **Review Immunization History**

- Review every patient's immunization history at every health care visit to assess for needed vaccines.
- You may encounter persons who do not have documentation of the vaccines they have received.
  - Only accept written, dated records as evidence of vaccination (exception for influenza vaccine and pneumococcal polysaccharide vaccine (PPSV23) - self-reported doses of these vaccines are acceptable).
- Vaccinations should not be postponed if records are not available, but you should attempt to locate missing records by:
  - Contacting the patient's previous health care providers and/or the immunization program at the state or local health department
  - Reviewing state or local IIS data
  - Asking patients to search for a personal vaccination record
  - Having a clerk check the patient's I-CARE immunization history

Illinois Department of Public Health Patient Immunization History Report

Report Date: 5/10/2022 2:56 PM





#### VALID SHOTS

Group	Shot Date	Shot Date	Shot Date	Shot Date	Shot Date	Shot Date	Shot Date
DTP	05/05/2017	07/14/2017	09/08/2017	09/07/2018	04/05/2021		
нів	05/05/2017	07/14/2017	09/08/2017	06/15/2018			
HAV	09/07/2018	03/08/2019					
HBV	05/05/2017	12/08/2017					
FLU	09/08/2017	12/08/2017	03/08/2019	10/04/2019	10/24/2020	11/11/2021	
MMR	03/09/2018	04/05/2021					
PNE	05/05/2017	07/14/2017	09/08/2017	06/15/2018			
POL	05/05/2017	07/14/2017	09/08/2017	04/05/2021			
ROT	05/05/2017	07/14/2017	09/08/2017				
VAR	03/09/2018	04/05/2021					
COVID-19	03/31/2022	04/21/2022					
	VA	LID OVERI	DUE			SHC	DTS DUE LATER
Forecast Da	te	Vacci	ne Group		Forecast Da	te	Vaccine Group
02/02/2018 Hepatitis B			09/01/2022		Influenza		
		03/03/2028		Meningococcal Disease			
No lovelid el							
to invalid si							

No Additional Information

#### SHOT HISTORY DETAILS

Group	#	Vaccine	Date	Status	Site	Mnf	Lot	Exp Date
DTP	1	Pentacel	05/05/2017	ок	CHILDRENS HEALTHCARE ASSOCIATES PC	РМС	C4930AB/C5 311AC	



## **★** Assess for Needed Immunization

- Use the current <u>Advisory Committee on Immunization Practices (ACIP) immunization</u> <u>schedule</u> (child/adolescent or adult) to determine what recommended vaccines are needed based on the patient's immunization history.
- Be sure to assess for routinely recommended vaccines at every visit, as well as any vaccines that are indicated based on health status, occupation, or other risk factors.
- Child and Adolescent Immunization Schedule (birth-18yo) here
- Adult Immunization Schedule (19yo-older) <u>here</u>
- Chicago Public School Minimum Health Requirements 2022-2023 here

### Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2023

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2-3 yrs	4-6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Hepatitis B (HepB)	1ª dose	< 2 <sup>nd</sup>	dose>		4		3 <sup>rd</sup> dose -		>								
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1ª dose	2 <sup>nd</sup> dose	See Notes												
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1ª dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose			<b>ح</b> 4 <sup>th</sup> c	lose>			5 <sup>th</sup> dose					
Haemophilus influenzae type b (Hib)			1ª dose	2 <sup>nd</sup> dose	See Notes		3 <sup>d</sup> or 4 See I	<sup>ton</sup> dose <u>,</u> Notes									
Pneumococcal conjugate (PCV13, PCV15)			1ª dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose		<b>∢</b> 4 <sup>th</sup> (	dose>									
Inactivated poliovirus (IPV <18 yrs)			1ª dose	2 <sup>nd</sup> dose	<b></b>		3 <sup>rd</sup> dose -					4 <sup>th</sup> dose					See Notes
COVID-19 (1vCOV-mRNA, 2vCOV-mRNA, 1vCOV-aPS)						2- or 3- dose primary series and booster (See Notes)											
Influenza (IIV4)								Annual vac	cination 1 o	r 2 doses				Annu	al vaccinatio	on 1 dose o	nly
Influenza (LAIV4)											Ann 1	ual vaccinat or 2 doses	tion	Ann	ual vaccinati	on 1 dose o	only
Measles, mumps, rubella (MMR)					See	Notes	<b>∢-</b> 1 <sup>st</sup> (	dose>				2 <sup>nd</sup> dose					
Varicella (VAR)							<b>∢-</b> 1 <sup>st</sup> (	dose>				2 <sup>nd</sup> dose					
Hepatitis A (HepA)					See	Notes		2-dose serie	es, See Note	s							
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)														1 dose			
Human papillomavirus (HPV)														See Notes			
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2years)								See Notes						1 <sup>#</sup> dose		2 <sup>nd</sup> dose	
Meningococcal B (MenB-4C, MenB-FHbp)														_	See No	tes	
Pneumococcal polysaccharide (PPSV23)														See Notes			
Dengue (DEN4CYD; 9-16 yrs)														Seropos dengue a	itive in ende areas (See No	mic otes)	
Range of recommended ages for all children	Range of r for catch-u	recommenc up vaccinati	led ages ion	Ran	nge of recor certain hig	mmended a h-risk group	ges s	Recomi can beg	mended vac jin in this ag	cination e group	Re	ecommend n shared clir	ed vaccination nical decision	on based n-making	No	recomme ot applicabl	ndation/ le



### Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2023

Vaccine	19–26 years	27–49 years		50–64 years	≥65 years	
COVID-19	2- or 3- dose primary series and booster (See Notes)					
Influenza inactivated (IIV4) or Influenza recombinant (RIV4)		1 dose annually				
Influenza live, attenuated (LAIV4)		1 dose annually				
Tetanus, diphtheria, pertussis	1 dos	e Tdap each pregnancy; 1 do	se Td/T	dap for wound management (see i	notes)	
(Tdap or Td)		1 dose Tdap, then T	d or Tda	ap booster every 10 years		
Measles, mumps, rubella (MMR)		1 or 2 doses deper (if born in 1			For healthcare personnel, see notes	
Varicella (VAR)	2 doses (If born in 1980 or later)			2 doses		
Zoster recombinant (RZV)	2 doses for immunocompro	2 doses for immunocompromising conditions (see notes)			oses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years				
Pneumococcal		See Notes				
(PCV15, PCV20, PPSV23)		OR 1 dose PCV20 (	see no	tes)	See Notes	
Hepatitis A (HepA)		2, 3, or 4 dos	es dep	ending on vaccine		
Hepatitis B (HepB)		2, 3, or 4 doses de	pendin	g on vaccine or condition		
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations					
Meningococcal B (MenB)	Meningococcal B       2 or 3 doses depending on vaccine and indication, see notes for booster recommendations         (MenB)       19 through 23 years			mendations		
Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication					
Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection additional risk factor or another indication				n shared No recommendation/ Not applicable		



## **★** Chicago Public Schools (CPS)



### Minimum Health Requirements 2022-2023

Evidence shows that healthy students have better attendance patterns and perform better academically. The health requirements outlined in this document apply to all children enrolled in a Chicago Public School. Children must provide proof of required immunizations and school physical exam before October 15, 2021, or they will face exclusion from school.

#### VIEW IN ENGLISH

VIEW IN SPANISH

#### **Examination Requirements**

- Physical Examination
- Vision Examination
- Dental Examination

#### Immunization Requirements

- Diphtheria, Pertussis (Whooping Cough) & Tetanus (DTP, DTaP & Tdap)
- Polio
- Measles, Mumps, and Rubella (MMR)
- Hepatitis B
- Varicella (Chicken Pox)
- Haemophilus Influenzae, ype B (HIB)
- Pneumococcal Conjugate (PCV)
- Meningitis Conjugate (MCV4)

### See more details here

## **★** Chicago Public Schools (CPS)



### Recommended Vaccines: HPV, Flu, and COVID-19

HPV, Flu, and COVID-19 vaccines are recommended by doctors, nurses, and respected medical and public health organizations, such as the American Cancer Society, the Centers for Disease Control and Prevention, and the Chicago Department of Public Health.

#### Flu Vaccine

Protect your child from influenza every year. Getting a flu shot every year is the best opportunity to avoid this illness.

#### COVID-19 Vaccine

Protect your child from COVID-19. This vaccine protects people from serious illness and hospitalization from COVID-19.

#### **HPV Vaccine**

Protect your child now against cancer later in life. This vaccine series prevents six kinds of cancers.

VIEW IN ENGLISH

VIEW IN SPANISH

### See more details here

## Screen for Contraindications and Precautions

- Patients and their family members count on health care personnel to administer vaccines safely.
- Always screen patients for contraindications and precautions before a vaccine is administered, *even if the same vaccine was administered previously*.
- A patient's health status or the recommendations for contraindications and precautions may have changed since the last dose was given.
- Screening helps prevent adverse reactions such as anaphylaxis.
- At each visit, use a standardized screening tool to assess patients consistently and correctly.
- For example:
  - DTaP Precaution: Progressive neurologic disorder
  - MMR Contraindicated: Pregnancy
  - See Appendix A for charts

Resource: Contraindication and Precautions to Commonly Used Vaccines

## **★** Educate the Patient/Guardian

- Be prepared to provide comprehensive vaccine information. Studies show:
  - A strong recommendation from a health care provider is the single most important factor in determining whether someone gets vaccinated.
  - People want clear and consistent information about vaccines.
- Vaccine Information Statements (VISs) are information sheets produced by CDC that explain the benefits and risks of a vaccine.
- Federal law mandates that a VIS must be given (EUA if VIS is not available) to:
  - Anyone receiving a vaccine or to that person's parent or caregiver
  - Every time a dose of vaccine is administered, even if the patient has received that vaccine or VIS before
  - Before administering the vaccine to allow time for questions

Resource page: <u>CDC</u>

## Influenza (Flu) Vaccine (Inactivated or Recombinant): *What you need to know*

Many vaccine information statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

# **Example of a VIS**

#### 1. Why get vaccinated?

#### Influenza vaccine can prevent influenza (flu).

Flu is a contagious disease that spreads around the United States every year, usually between October and May. Anyone can get the flu, but it is more dangerous for some people. Infants and young children, people 65 years and older, pregnant people, and people with certain health conditions or a weakened immune system are at greatest risk of flu complications.

Pneumonia, bronchitis, sinus infections, and ear infections are examples of flu-related complications. If you have a medical condition, such as heart disease, cancer, or diabetes, flu can make it worse.

Flu can cause fever and chills, sore throat, muscle aches, fatigue, cough, headache, and runny or stuffy nose. Some people may have vomiting and diarrhea, though this is more common in children than adults.

In an average year, thousands of people in the United States die from flu, and many more are hospitalized. Flu vaccine prevents millions of illnesses and flu-related visits to the doctor each year.

#### 2. Influenza vaccines

CDC recommends everyone 6 months and older get vaccinated every flu season. Children 6 months through 8 years of age may need 2 doses during a single flu season. Everyone else needs only 1 dose each flu season.

It takes about 2 weeks for protection to develop after vaccination.

There are many flu viruses, and they are always changing. Each year a new flu vaccine is made to protect against the influenza viruses believed to be likely to cause disease in the upcoming flu season. Even when the vaccine doesn't exactly match these viruses, it may still provide some protection.

Influenza vaccine does not cause flu.

Influenza vaccine may be given at the same time as other vaccines.

### 3. Talk with your health care provider

Tell your vaccination provider if the person getting the vaccine:

- Has had an allergic reaction after a previous dose of influenza vaccine, or has any severe, lifethreatening allergies
- Has ever had Guillain-Barré Syndrome (also called "GBS")

In some cases, your health care provider may decide to postpone influenza vaccination until a future visit.

Influenza vaccine can be administered at any time during pregnancy. People who are or will be pregnant during influenza season should receive inactivated influenza vaccine.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting influenza vaccine.

Your health care provider can give you more information.



# **Prepare the Vaccine(s)**

- Proper preparation is critical for maintaining the integrity of the vaccine during transfer from the vial to the syringe. Always use aseptic technique and follow infection prevention guidelines when preparing vaccines.
- 1. Prepare vaccines in a clean, designated medication area away from where the patient is being vaccinated and away from any potentially contaminated items.
- 2. Health care personnel should ensure their clinic has the supplies needed to administer vaccines.
- 3. Health care personnel should complete proper hand hygiene before preparing vaccines.
- 4. Use a separate needle and syringe for each injection.
- 5. Always check the expiration dates on the vaccine, diluent, syringes and needles. NEVER use expired vaccine, diluent, or equipment.
- 6. Prepare vaccines only when you are ready to administer them.
- 7. Only administer vaccines you have prepared when applicable. This is a medication administration best practice standard. If vaccine is drawn up by one person but administered by another, the person administering the vaccine cannot be sure what is in the syringe and whether it is safe.

# **\*** Prepare the Vaccine(s)

- How to videos for:
  - <u>Single-dose Vial</u>
  - Multidose Vial
  - Assemble a Manufacturerfilled Syringe
- Reconstitute Lyophilized Vaccine
  - Video
  - Handout

\*Please watch all videos before event

### Vaccines with Diluents: How to Use Them

Be sure to reconstitute the following vaccines correctly before administering them! Reconstitution means that the lyophilized (freeze-dried) vaccine powder or water in one vial must be mixed with the diluent (liquid) in another.

- Only use the diluent provided by the manufacturer for that vaccine as indicated on the chart.
- ALWAYS check the expiration date on the diluent and vaccine. NEVER use expired diluent or vaccine.

Vaccine product name Manufacturer		Lyophilized vaccine (powder)	Liquid diluent (may contain vaccine)	Time allowed between reconstitution and use, as stated in package insert*	Diluent storage environment
ActHIB (Hib)	ActHIB (Hib) Sanofi		Sodium chloride 0.4%	24 hrs	Refrigerator
Comirnaty (COVID-19, some formulations)	Pfizer-BioNTech	1vCOV-mRNA or 2vCOV-mRNA	Sodium chloride 0.9%, unpreserved	12 hrs†	Refrigerator or room temp
Dengvaxia (DEN4CYD)	Sanofi	Dengue	Sodium chloride 0.4%	30 min	Refrigerator
Hiberix (Hib)	GSK	Hib	Sodium chloride 0.9%	24 hrs	Refrigerator or room temp
Imovax (RAB <sub>HDCV</sub> )	Sanofi	Rabies virus	Sterile water	Immediately <sup>‡</sup>	Refrigerator
M-M-R II (MMR)	M-R II (MMR) Merck	MMR	Sterile water	8 hrs	Refrigerator or room temp
Menveo <sup>§</sup> (MenACWY)	GSK	MenA	MenCWY	8 hrs	Refrigerator
Pentacel (DTaP-IPV/Hib)	Sanofi	Hib	DTaP-IPV	Immediately <sup>‡</sup>	Refrigerator
ProQuad (MMRV)	Merck	MMRV	Sterile water	30 min	Refrigerator or room temp
RabAvert (RAB <sub>PCECV</sub> )	GSK	Rabies virus	Sterile water	Immediately <sup>‡</sup>	Refrigerator
Rotarix <sup>5,1</sup> (RV1)	GSK	RV1	Sterile water, calcium carbonate, and xanthan	24 hrs	Refrigerator or room temp
Shingrix (RZV)	GSK	RZV	AS01B <sup>¶</sup> adjuvant suspension	6 hrs	Refrigerator
Varivax (VAR)         Merck           Vaxchora (CVD 103-HgR)         Emergent		VAR	Sterile water	30 min	Refrigerator or room temp
		Cholera	Buffer solution plus bottled water	15 min	Refrigerator
YF-VAX (YF)	Sanofi	YF	Sodium chloride 0.9%	60 min	Refrigerator or room temp

Always refer to package inserts for detailed instructions on reconstituting specific vaccines. In general, follow the steps below.

- 1 For single-dose vaccine products (exceptions: Rotarix, Vaxchora), select a syringe and needle of proper length to be used for both reconstitution and administration of the vaccine. For Rotarix and Vaxchora, see the package insert.
- · inserting needle of syringe into diluent vial and lyophilized powder.
- 4 Check the appearance of the reconstituted vaccine. insert.

as "DO NOT USE," return it to proper storage

- neither the vaccine nor the diluent has expired. matter, obvious lack of resuspension, or the 3 Reconstitute (i.e., mix) vaccine just prior to use by: vaccine cannot be thoroughly mixed, mark the vial
- · removing the protective caps and wiping each stopper with an alcohol swab.

2 Before reconstituting, check labels on both the

the diluent is the correct volume, and

lyo-philized vaccine vial and the diluent to verify that

they are the correct two products to mix together.

- withdrawing entire contents, and · injecting diluent into lyophilized vaccine vial and rotating or inverting to thoroughly dissolve the
- Reconstituted vaccine may be used if the color and appearance match the description on the package
- . If there is discoloration, extraneous particulate
- conditions, and contact your state or local health department immunization program or the vaccine manufacturer
- 5 If reconstituted vaccine is not used immediately or comes in a multidose vial, be sure to · clearly mark the vial with the date and time the
- vaccine was reconstituted. maintain the product at 2°-8°C (36°-46°F)<sup>†</sup>; do not
- freeze, and use only within the time indicated on chart above

<sup>†</sup>Comirnaty may be stored after reconstitution in the refrigerator or at room temp (up to 77°F, 25°C) for up to 12 hours.

AS01B is composed of 3-O-desacvI-4-monophosphoryl lipid A (MPL) from Salmonella minnesota and OS-21, a saponin purified from plant extract Quillaja saponaria Molina, combined in a liposomal formulation. The liposomes are composed of dioleoyl phosphatidylcholine (DOPC) and cholesterol in phosphate-buffered saline solution containing disodium phosphate anhydrous, potassium dihydrogen phosphate, sodium chloride, and water for injection.





FOR PROFESSIONALS www.immunize.org / FOR THE PUBLIC www.vaccineinformation.org

<sup>&</sup>quot;If the reconstituted vaccine is not used within this time period, it must be discarded.

<sup>&</sup>lt;sup>‡</sup>For purposes of this guidance, Immunize.org defines "immediately" as within 30 minutes or less.

<sup>9</sup>This product is also available as a liquid formulation that does not require reconstitution

Rotarix vaccine is administered by mouth using the applicator that contains the diluent. It is not administered as an injection.



Techniques for Using Alcohol-Based Hand Sanitizer

- Put products on hands and rub hands together
- Cover all surfaces until hands feel dry
- This should take about 20 seconds

Techniques for Washing Hands with Soap and Water

- The <u>CDC Guideline for Hand Hygiene in Healthcare Settings</u> recommends:
  - When cleaning your hands with soap and water, wet your hands first with water, apply the amount of product recommended by the manufacturer to your hands, and rub your hands together vigorously for at least 15-20 seconds, covering all surfaces of the hands and fingers.
  - Rinse your hands with water and use disposable towels to dry. Use towel to turn off the faucet.
  - Avoid using hot water, to prevent drying of skin.



- Considerations for Time Outs & the 5 "Rights"
  - Right Patient (tip: verify patient age)
  - Right Vaccine
  - Right Route
  - Right Time
  - Right Dose

- Each vaccine has a recommended administration route and site. This information is included in the manufacturer's package insert for each vaccine.
- Deviation from the recommended route may reduce vaccine efficacy or increase local adverse reactions.
- Always perform hand hygiene before administering vaccines by any route. Occupational Safety and Health Administration (OSHA) regulations typically *do not require gloves to be worn when administering vaccines* unless the person administering the vaccine is likely to come in contact with potentially infectious body fluids or has open lesions on the hands.

### • Vaccines available in the United States are administered by 4 routes:

1. Oral Route (PO):

Oral vaccine is administered through drops to the mouth. Rotavirus vaccine (RV1 [Rotarix], RV5 [RotaTeq]) is the only routinely recommended vaccine administered orally. Rotavirus vaccine should never be injected.

- Rotarix (RV1) <u>Video</u>
- RotaTeq (RV15) <u>Video</u>

2. Intranasal Route (NAS):

Intranasal vaccine is administered into each nostril using a manufacturer-filled nasal sprayer. Live, attenuated influenza (LAIV [FluMist]) vaccine is the only vaccine administered by the intranasal route.

• <u>Video</u>

3. Subcutaneous Route (Subq): Subcutaneous injections are administered into the fatty tissue found below the dermis and above muscle tissue.

- <u>Video</u>
- Ex: MMR





4. Intramuscular Route (IM): Intramuscular injections are administered into the muscle through the skin and subcutaneous tissue. The recommended site is based on age.

• <u>Video</u>







When administering a vaccine by injection, choose the correct needle size based on the route, age, patient size, and injection technique. See chart below to identify the route for each injectable vaccine.

INJECTABLE VACCINES	ROUTE	SITE*
DTaP, DT, HepA, HepB, Hib, HPV, IIV4, RIV4, ccIIV4, IPV*†, MenACWY, MenB, MMR‡ , PCV13, PPSV23*†, RZV, Td, Tdap, TT, VAR†	Intramuscular injection	Vastus Lateralis or Deltoid muscle
IPV*+, MMR <sup>‡</sup> , PPSV23*+, VAR+	Subcutaneous injection	Fatty tissue of thigh for infants younger or upper outer triceps area

COMBINATION VACCINES	ROUTE	
DTaP-IPV, DTaP-IPV-HepB, DTaP-IPV/Hib, DTaP-IPV- HepB/Hib, HepA-HepB, MMRV†	Intramuscular injection	Vastus Lateralis or Deltoid muscle
MMRV <sup>+</sup>	Subcutaneous injection	Fatty tissue of thigh for infants younger or upper outer triceps area

\*Based on age. Detailed discussion can be found here: Pinkbook: Vaccine Administration | CDC

+Vaccine may administered by intramuscular or subcutaneous injection

\*MMR vaccine injection route varies by brand. PRIORIX is administered by subcutaneous route only. M-M-R II may be administered by the subcutaneous or intramuscular route.

Some vaccines are approved by the Food and Drug Administration (FDA) for administration by the Pharmajet Stratis needlefree injection system. This system administers vaccines by creating a narrow stream capable of penetrating the skin. For more information, see the manufacturer's website.



## Vaccine Administration



## Route, Needle Size, Injection Site

### Intramuscular (IM) injection

Use a 22–25 gauge needle. Choose the injection site and needle length that is appropriate to the person's age and body mass.

AGE	NEEDLE LENGTH	INJECTION SITE
Newborns (1st 28 days)	5/8"1	Anterolateral thigh muscle
Infants (1–12 mos)	ן"	Anterolateral thigh muscle
Toddlors (1, 2 years)	1–11⁄4"	Anterolateral thigh muscle <sup>2</sup>
Toddiers (1–2 years)	5/8—1" <sup>1</sup>	Deltoid muscle of arm
Children	5/8—1" <sup>1</sup>	Deltoid muscle of arm <sup>2</sup>
(3–10 years)	1–11⁄4"	Anterolateral thigh muscle
Adolescents and teens	5/8—1" <sup>1</sup>	Deltoid muscle of arm <sup>2</sup>
(11–18 years)	1–11⁄2"	Anterolateral thigh muscle
Adults 19 years or older		
Female or male <130 lbs	5/8—1" <sup>1</sup>	Deltoid muscle of arm
Female or male 130–152 lbs	ן"	Deltoid muscle of arm
Female 153–200 lbs Male 153–260 lbs	1–11⁄2"	Deltoid muscle of arm
Female 200+ lbs Male 260+ lbs	11⁄2"	Deltoid muscle of arm
Female or male, any weight	11/2"	Anterolateral thigh muscle



## **★** Best Practices for Multiple Injections

- For older children and adults, the deltoid muscle can be used for more than one intramuscular injection administered at different sites in the muscle
- For infants and younger children (less than 3 years old), if more than 2 vaccines are injected in a single limb, the vastus lateralis muscle of the anterolateral thigh is the preferred site because of greater muscle mass
- Separate injection sites by 1 inch or more, give in different limbs if possible



## **X** Best Practices for Multiple Injections

- Use combination vaccines (ex: DTaP-IPV-HepB or DTaP-IPV/Hib) to reduce the number of injections, when appropriate.
  - Do NOT mix more than one vaccine in the same syringe to create a "combination vaccine."
- Administer vaccines that are known to be painful when injected last (ex: MMR, HPV, PCV).
  - Pain can increase with each injection, the order in which vaccines are injected matters.
  - Injecting the most painful vaccine last when multiple injections are needed can decrease the pain associated with the injections.
- Administer vaccines that may be more likely to cause a local reaction (ex: tetanustoxoid-containing, PCV, MCV4) in different limbs, if possible.
- CDC and ACIP <u>guidance</u> states COVID -19 vaccines can be given during the same visit with other vaccines, including flu vaccine, if the patient is eligible for the vaccines.

Resource: Additional information on coadministration of vaccines



Resource: here

Make sure the vaccine you administer contains the antigens on the doctor's order. Keep it simple. Stick with the same product.

This is a suggested schedule for VFC providers ordering combination vaccines. For alternatives and details, consult the latest "Recommended Immunization Schedules for persons aged 0-18 years, United States." For more info, visit EZIZ.ORG

- <sup>1</sup> A dose of Hepatitis B vaccine is not necessary at 4 months if doses are given at birth and 2 months but may be included as part of a combination vaccine.
- <sup>2</sup> The six month dose is not needed if Rotarix<sup>®</sup> was used exclusively for both dose 1 and 2 of the rotavirus vaccine series.
- <sup>3</sup> This six month Hib dose is not indicated if PedvaxHIB<sup>®</sup> is used exclusively for the 2 and 4 month infant doses.
- <sup>4</sup> CDC recommends MMR + Varicella at 12-15 months. Providers can use their discretion whether to use MMRV, however.
- <sup>5</sup> Can be administered as late as 15 months. For more information, consult the Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2021.

<sup>6</sup> Influenza vaccine is available in thimerosal-free options. See California Health and Safety Code § 124172.

<sup>7</sup> Licensed by FDA for children 4 through 6 years with previous doses of IN-FANRIX™ or PEDIARIX™. ACIP recommends that, whenever feasible, the same manufacturer's DTaP vaccines be used for each dose in the series; however, vaccination should not be deferred because the type of DTaP previously administered is unavailable or unknown. See www.cdc.gov/mmwr/ preview/mmwrhtm//mm5739a4.htm.

<sup>8</sup> Licensed by FDA for children 6 weeks through 4 years of age (prior to the 5th birthday).



## **Giving All the Doses Under 12 Months**

PCV (IM)

Hib (IM

IPV (IM)

For additional vaccine administration information see:

"Administering Vaccines: Dose, Route, Site, and Needle Size"

at www.immunize.org/catg.d/p3085.pdf



- IM injections are given in the anterolateral thigh using a 1" needle (see 
   below for placement)
  - Separate IM injection sites by a minimum of 1"
- SC injections are given in the thigh using a 5/8" needle (see 
   below for placement)
  - If necessary, the upper outer triceps area can be used
- Using combination vaccines decreases the number of injections
  - IPV must be given IM when given as a combination vaccine (e.g., DTaP-IPV/Hib, DTaP-IPV-HepB)

No Buttocks!

- Administer vaccines likely to cause greater local reaction (e.g., DTaP, PCV) into separate limbs
- Give the most painful injections last (i.e., PCV)



handout only displays routine vaccines.



Revised: June 25, 2019

## Giving All the Doses 12 Months and Older



- · IM injections are given in the anterolateral thigh (preferred site for 12 mos.-2 yrs.) using a 1" needle
  - Separate IM injection sites by a
  - Deltoid is preferred IM site for 3 yrs.
    - Anterolateral thigh is an alternative site if deltoid cannot be used
- SC injections are given in the upper outer triceps area or thigh using a 5/8" needle (see • to the left for placement in triceps area)
- Using combination vaccines decreases the number of injections
  - IPV must be given IM when given as a combination vaccine (e.g., DTaP-IPV/Hib, DTaP-IPV-HepB)
- Give vaccines likely to cause greater local reaction (e.g., DTaP, PCV) into
- Give the most painful injections last



Revised: June 25, 2019

## **Giving All the Doses: Adolescents**



- IM injections are given in the deltoid muscle (preferred site for 3 yrs. and older) at a 90° angle using a 1-1 ½" needle
  - Separate IM injection sites by a minimum of 1"
  - The anterolateral thigh is an alternative site if deltoid cannot be used

MenB (IM) (Bexsero, Trumenba) HPV (IM) Tdap (IM)





For additional vaccine administration information see: "Administering Vaccines: Dose, Route, Site, and Needle Size" at <u>www.immunize.org/catg.d/p3085.pdf</u>

- SC injections are given in the upper outer triceps area at a 45° angle using a 5/8" needle
  - The thigh is an alternative site if outer triceps area cannot be used
- Give vaccines likely to cause greater local reaction (e.g., Tdap, MenACWY) in separate limbs
- Give the most painful injections last (i.e., HPV)
  - Seasonal Influenza (IM) MenACWY (IM) (Menactra, Menveo) VAR (SC)

Give other vaccines as needed (to bring up-to-date, high-risk): MMR (SC), HepA (IM), PCV13 (IM), and PPSV23 (IM)



### TIPS & TRICKS TO HELP YOU AND YOUR LITTLE ONE GET THROUGH THE NEEDLESTICK



#### Before

Plan to hold your infant or toddler upright during their shot. A comforting hold can help by:

- Providing a feeling of safety
- Keeping your child from being scared you'll be holding them rather than having to overpower or fight them
- Allowing the vaccine to be given carefully

If you breastfeed, plan to breastfeed before, during and for a few minutes after the 🔨 vaccination. If you don't breastfeed, ask if your healthcare provider has sugar water, sometimes called Tootsweet.™

#### Check in with your own feelings.

It can be hard to see your child get a vaccine, remind yourself that you are doing the best thing for them by getting them vaccinated. Children feel calmer when you are calm. If you are nervous, take a few slow deep breaths so your belly expands, not your chest. You can do this kind of breathing anutime!

#### **Different Positions**

1. Swaddle your baby 2. Take out the leg that the vaccine will be administered to

#### Back-to-Chest

Swaddle (for babies)

1. Hold the child on your lap facing away from you 2. Place your arms over their arms for a hug-like hold 3. For older children, anchor your child's feet between uour thighs/legs or hold with your other hand

### Sideways Lap Sit

1. Have your child sit on your lap facing sideways 2. Secure the child's arm with uour own arm

During: Holding

3. Secure their legs with your own leg

#### Chest-to-Chest

1. Have your child sit on your lap facina uou 2. Wrap their legs around your waist 3. Their arm can go under or over your arm

Use your normal speaking voice and tone. Stay positive. Stay Calm.

#### More important information on the other side

IMAGES OF HOLDS

### TIPS & TRICKS TO HELP YOU AND YOUR LITTLE ONE GET THROUGH THE NEEDLESTICK



#### During

Distract them. Help your child focus their attention somewhere else during their vaccine.

For babies up to 12 months

- Softly talk or sing songs
- Gently cuddle them
- Offer a pacifier
- Breastfeed (children older than 12 months too!)



#### For preschoolers ages 4 to 6 years

- Count, say the ABCs or sing with them let them fill in some of the numbers or words
- Read a storu
- Let them watch a video on a phone or tablet
- Play a game that doesn't require moving (like I spy)

For toddlers ages 1 to 3 years

• Play a video on a phone/tablet

• Offer a favorite or new toy

• Give them a job or task

Read a storu

• Ask them to tell you what they see in the space you're in or what they want for dinner

Be extra loving, kind and supportive. Hold and cuddle your child.

#### Keep an eye on them.

Some vaccines cause short term pain or discomfort – and your child may be fussy after their shot because of this. Remember you're protecting them from diseases that can hurt a lot more – and the hurt from those diseases last a lot longer or a lifetime!

- If your child's leg or arm is red or swollen, you can apply a clean, cool, wet washcloth for comfort.
- If your child is in pain, you can give them the recommended dose of acetaminophen or ibuprofen. Do not aive aspirin.

#### Call your child's healthcare provider if you have any questions or concerns.







After

### **RECOMENDACIONES PARA QUE USTED Y SUS** HIJOS SUPEREN EL MIEDO A LA VACUNA

#### Antes

Planee sostener a su bebe o niño vertical durante la vacunación. Un apretón cómodo puede ayudar a:

- Ofrecer una sensación de seauridad
- Permitir que la vacuna se administre con cuidado
- Evitar que su hijo tenga miedo – lo sostendrás en vez de dominarlo o luchar con él.
- También... • Si amamantas, planee amamantar antes, durante, u por unos minutos después de la vacunación

#### Consulte con sus propios sentimientos

Puede ser difícil ver a su hijo con dolor, recuérdese que haces lo mejor para el por vacunarlo. Los niños sentirán más tranquilos cuando ven que tú también estás tranauilo.

Si sientes nervioso, respira lentamente y profundamente. Respire para que el estómago expande, no el pecho. Puedes hacer esto en cualquier momento - antes de la vacunación, mientras sostiene a su hijo durante la vacunación, o mientras estás caminando o manejando.

### Durante: Agarrando 🛹

#### **Posiciones Diferentes**

#### Fajar (para bebés)

1. Faje a tu bebé 2. Sague la pierna donde se administrará la vacuna

#### Espalda a Pecho

1. Sostenga al niño en su regazo de espaldas a usted.

2. Coloque sus brazos sobre sus brazos para un apretón como un abrazo

3. Para niños mayores, ponga los pies de su hijo entre sus muslos/piernas o agarrelos con la otra mano.

#### <u>De lado sentado en tu Regazo</u> 1. El niño se sienta de lado en su

regazo 2. Amarra el brazo del niño con el tuyo.

3. Amarra sus piernas con tu propia pierna

#### Pecho a Pecho

1. El niño se sienta en su regazo frente a usted 2. Envuelva las piernas alrededor su cintura.

3. El brazo de ellos puede pasar por debajo o de encima de su brazo

Use la voz y tono de voz normales. Manténgase positiva. Manténgase tranquilo.

#### Más información importante en el otro lado

IMAGES OF HOLDS

### **RECOMENDACIONES PARA QUE USTED Y SUS** HIJOS SUPEREN EL MIEDO A LA VACUNA



#### Durante

Distráelos. Ayude que su hijo se concentre en algo diferente durante la vacunación.

Para bebés con menos de un año

- Habla en voz baja o cante
- Abrácelos suavemente
- Ofrezca un chupete
- Pida agua con azúcar (a veces se llama TootSweet)
- Para ninos entre 1-3 años
- Lea un cuento
- Permitirles mirar un video en el móvil o la tableta
- Ofrezca un juguete favorito o nuevo
- Dales un trabajo o tarea

#### Para preescolares entre 4-6 años

- Cuente el abecedario o cante con ellos permítales completar uno de los números o palabras
- Lea un cuento
- Permítales mirar un video en el móvil o la tableta
- Juega un juego que no requiere movimiento (como veo veo)
- Pregúnteles que ven en el cuarto o que quieren comer para la cena

#### Después

Sea muy amoroso, amable, y comprensivo. Sostenga y abrace a su hijo. Viaílalos

Algunas vacunas pueden causar dolor o incomodidad a corto plazo - y por eso su hijo puede estar quisquilloso depues de la vacunación. Recuerde que estás protegiéndolos de enfermedades que les pueden doler mucho más - y el dolor de esas enfermedades dura más tiempo o por toda la vida!

- Si la pierna o el brazo de su hijo esta rojo o hinchado, puedes aplicar una toallita limpia, fría, y mojada para comodidad
- Si su hijo tiene dolor, les puede dar la dosis recomendada de acetaminofeno o ibuprofeno. No les des aspirina.

Llame al proveedor de asistencia medical de su hijo si tiene preguntas o preocupaciones



Illinois Chapter American Academy of Pediatrics





## **X** Medical Management of Vaccine Reactions

### Managing Acute Vaccine Reactions

- Severe, life-threatening reactions following vaccinations are rare. However, all vaccination providers should be familiar with the office emergency plan and currently certified in cardiopulmonary resuscitation.
- All health care professionals who administer vaccines to older children, adolescents, and adults should be aware of the potential for syncope after vaccination and the related risk of injury caused by falls. Appropriate measures should be taken to prevent injuries if a patient becomes weak or dizzy or loses consciousness, including:
  - Have the patient seated.
  - Be aware of symptoms that precede fainting (ex: weakness, dizziness, pallor).
  - Provide supportive care and take appropriate measures to prevent injuries if such symptoms occur.
  - Observe recipients after vaccination to decrease the risk for injury should they faint.
    - For most vaccines, a 15-minute observation period is recommended.
    - Some persons should be observed longer (ex: 30 minutes), after receiving COVID-19 vaccine. Detailed guidance can be found <u>here</u>.



## **X** Preparing for Management of Anaphylaxis

Will be available at all locations

- Epinephrine (ex: prefilled syringe, autoinjector)
- H1 antihistamine (ex: diphenhydramine, cetirizine)
- Timing device to assess pulse
- Ammonia (smelling) salts/towlettes
- Standing orders (See Appendix B for example)

Note: Anaphylaxis after COVID-19 vaccination is rare and has occurred at a rate of approximately 5 cases per 1 million vaccine doses administered: <u>CDC page</u>

# **★** Document the Vaccination(s)

- Health care providers are required by law to record certain record certain information in a patient's medical record. This record can be in electronic or paper form.
- Health care providers who administer vaccines covered by the National Childhood Vaccine Injury Act are required to ensure that the permanent medical record of the recipient indicates:
  - Date of administration
  - Vaccine manufacturer
  - Vaccine lot number
  - Name and title of the person who administered the vaccine and address of the facility where the permanent record will reside
  - VIS
    - Date printed on the VIS
    - Date the VIS was given to the patient or parent/guardian
- Always provide a personal vaccination record to the patient or parent that includes the names of vaccines administered and the dates of administration.

# **★** Document the Vaccination(s)

- Immunization Information Systems (IIS)
  - Confidential, computerized databases that record and consolidate information on all vaccine doses administered by participating providers.
  - Using an immunization information system to document vaccines administered can help to keep patient vaccination records up to date and give all medical providers that care for a patient access to complete and accurate information about the patient's immunization history.

# **VACCINE CLINIC MANAGEMENT SYSTEM** (VCMS)

- <u>VCMS Training Video</u>
  - \*Please watch before event
- iPads
  - Password CDPH2374
  - Use Google Chrome
  - Private mode
  - Last resort, hard reset
  - Complete <u>CDPH iPad Error Reporting</u> <u>Form</u> if experience issues with iPad See Appendix C

- City of Chicago Login <u>here</u>
- Non-City of Chicago Staff Login via Okta <u>here</u>
  - How to login in OKTA video
- VCMS Question?
  - Email getvaxchi@cityofchicago.org
  - \*Please sign into VCMS before event

# Vaccine Adverse Event Reporting System (VAERS)

- Early warning system that helps CDC and FDA monitor health problems that may occur following vaccination.
- Relies on healthcare providers and people sending in reports of their experiences.
- Report suspected adverse events following vaccination to VAERS for all vaccines including all COVID-19 vaccines authorized for emergency use.
- Instructions for submitting a report to VAERS are available <u>here</u> or by calling 1-800-822-7967

VAERS website: <u>here</u>



Healthcare providers who administer COVID-19 vaccines are required by law to report the following to VAERS:

1. Vaccine administration errors, whether or not associated with an adverse event (AE)

- If the incorrect mRNA COVID-19 vaccine product was inadvertently administered for a second dose in a 2-dose series, VAERS reporting is required.
- If a different product from the primary series is <u>inadvertently</u> administered for the additional or booster (third dose), VAERS reporting is required.



2. Serious AEs regardless of whether the reporter thinks the vaccine caused the AE:

- Death
- A life-threatening AE
- Inpatient hospitalization or prolongation of existing hospitalization
- A congenital anomaly/birth defect
- An important medical event that based on appropriate medical judgement may require medical or surgical intervention to prevent one of the outcomes listed above



3. Cases of Multisystem Inflammatory Syndrome (MIS or MIS-C).

- 4. Cases of COVID-19 that result in hospitalization or death
  - Healthcare providers should report to VAERS any additional clinically significant AEs following vaccination, even if they are not sure whether the vaccine caused the event.
  - VAERS reporting is not required for the following situations:
    - If a mixed series is given intentionally (ex: due to hypersensitivity to a vaccine ingredient)
    - Mixing and matching of booster doses



- Typically, CDPH is only offering the 6 months and older Pfizer products at CDPH CareVan events, unless mentioned otherwise.
  - 3 Pfizer products
- Monovalent mRNA COVID-19 vaccines are NO longer recommended and should NOT be used.
  - BIVALENT only

## **Products in Use**



https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-04-19/07-COVID-Twentyman-508.pdf



### AM I UP TO DATE WITH COVID-19 VACCINES?

### CHECK THE NEW, SIMPLIFIED GUIDANCE BELOW





FIND YOUR VACCINE AT: CHI.GOV/COVIDVAX



## **CDC Pfizer 6 Months and Older**

At least 1 dose of bivalent vaccine

#### Table 1b. For Most People (those who are NOT moderately to severely immunocompromised)

Bivalent Pfizer-BioNTech COVID-19 Vaccine:\* Monovalent Pfizer-BioNTech vaccine is no longer recommended and should not be used. Vaccine type: mRNA

Age	Vaccination History	Bivalent Vaccine Schedule <sup>†</sup>	Administer				
	Unvaccinated: 0 doses	3 doses. Administer: • Dose 1 now • Dose 2 at least 3–8 weeks <sup>¶</sup> after Dose 1 • Dose 3 at least 8 weeks (2 months) after Dose 2					
	1 dose of bivalent vaccine	2 doses. Administer: • Dose 2 at least 3–8 weeks <sup>1</sup> after Dose 1 • Dose 3 at least 8 weeks (2 months) after Dose 2	0.2 mL/3 μg from the vial with a maroon cap				
	2 doses of bivalent vaccine	1 dose. Administer: • Dose 3 at least 8 weeks (2 months) after Dose 2					
6 months	At least 3 doses of bivalent vaccine	No dose					
through 4 years <sup>‡§</sup>	Previously vaccinated with monovalent mRNA COVID-19 vaccine						
	1 dose of monovalent vaccine	2 doses. Administer: • Dose 2 at least 3–8 weeks <sup>1</sup> after Dose 1 • Dose 3 at least 8 weeks (2 months) after Dose 2					
	2 doses of monovalent vaccine	1 dose. Administer: • Dose 3 at least 8 weeks (2 months) after Dose 2	0.2 mL/3 μg from the vial with a maroon cap				
	3 doses of monovalent vaccine	1 dose. Administer: • Dose 4 at least 8 weeks (2 months) after Dose 3.					
	At least 2 doses of monovalent vaccine and 1 dose of bivalent vaccine	No dose	No dose.				
	Unvaccinated: 0 doses	1 dose now**	<b>5 through 11 years:</b> 0.2 mL/10 μg				
5 years and older <sup>‡</sup>	1 dose or more doses of monovalent vaccine <sup>§</sup>	1 dose. Administer: • Vaccine at least 8 weeks (2 months) after the previous dose**	from the vial with an orange cap <b>12 years and older:</b> 0.3 mL/30 $\mu g$ from the vial with a gray cap				
	At least 1 dose of bivalent vaccine	No dose**	No dose**				

No dose\*\*



#### Table 1c. For Most People (those who are NOT moderately to severely immunocompromised)

	Novavax <sup>*</sup> ( Type: Prote				
	Age	Vaccination History	Vaccine Schedule <sup>†</sup>	Administer	
<u>2</u> de	12 years and older	1 or more doses of monovalent Novavax vaccine	1 dose bivalent mRNA vaccine at least 8 weeks (2 months) after Dose 2 <sup>‡</sup>	Moderna: 0.50 mL/50 <i>ug</i> from the vial with a blue cap and gray label border. OR Pfizer-BioNTech: 0.3 mL/30 <i>ug</i> from the vial with a gray cap	
		At least 1 dose of bivalent vaccine	No dose‡	No dose‡	





## <u>CDC Pfizer 6 Months</u> <u>and Older - Severely</u> <u>Immunocompromised</u>

#### Table 2b. People Who are Moderately to Severely Immunocompromised

Bivalent Pf Vaccine <u>ty</u>	izer-BioNTech COVID-19 Vaccine: <sup>*</sup> Monovale pe: mRNA	ent Pfizer-BioNTech vaccine is no longer recommended and should	d not be used.	
Age	Vaccination History	Bivalent Vaccine Schedule	Administer	
	Unvaccinated: 0 doses	3 doses. Administer: • Dose 1 now. • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 8 weeks (2 months) after Dose 2. <sup>‡</sup>		
	1 dose of bivalent vaccine	2 doses. Administer: • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 8 weeks (2 months) after Dose 2. <sup>‡</sup>		
	2 doses of bivalent vaccine	1 dose. Administer: • Dose 3 at least 8 weeks (2 months) after Dose 2. <sup>‡</sup>		
5 months	3 doses of bivalent vaccine	See footnote <sup>‡</sup>	0.2 mL/3 µg	
through	Previously vaccinated with monovalent mRNA	COVID-19 vaccine	vial with a	
+ years'	1 dose of monovalent vaccine	2 doses. Administer: • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 8 weeks (2 months) after Dose 2. <sup>‡</sup>	maroon cap	
	2 doses of monovalent vaccine	1 dose. Administer: • Dose 3 at least 8 weeks (2 months) after Dose 2. <sup>‡</sup>		
	3 doses of monovalent vaccine	1 dose. Administer: • Dose 4 at least 8 weeks (2 months) after Dose 3. <sup>‡</sup>		
	At least 2 doses of monovalent vaccine and 1 dose of bivalent vaccine	See footnote <sup>‡</sup>		
	Unvaccinated: 0 doses	3 doses. Administer: • Dose 1 now. • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 4 weeks after Dose 2. <sup>‡</sup>		
	1 dose of bivalent vaccine	2 doses. Administer: • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 4 weeks after Dose 2. <sup>‡</sup>	5 through 11	
	2 doses of bivalent vaccine	1 dose. Administer: • Dose 3 at least 4 weeks after Dose 2. <sup>‡</sup>	0.2 mL/10 $\mu g$ from the	
5 vears†	3 doses of bivalent vaccine	See footnote <sup>‡</sup>	orange cap	
and older	Previously vaccinated with monovalent mRNA	COVID-19 vaccine	12 years and	
	1 dose of monovalent vaccine	2 doses. Administer: • Dose 2 at least 3 weeks after Dose 1. • Dose 3 at least 4 weeks after Dose 2. <sup>‡</sup>	older: 0.3 mL/30 µg from the vial	
	2 doses of monovalent vaccine	1 dose. Administer: • Dose 3 at least 4 weeks after the previous dose. <sup>‡</sup>	cap	
	3 doses of monovalent vaccine	1 dose. Administer: • Dose 4 at least 8 weeks (2 months) after Dose 3. <sup>‡</sup>		
	At least 1 dose of monovalent vaccine and 1 dose of bivalent vaccine	See footnote <sup>‡</sup>		



## <u>CDC Pfizer 12 Years</u> and Older - Severely Immunocompromised

#### Table 2c. People Who are Moderately to Severely Immunocompromised

Novavax <sup>*</sup> (I Type: Prote	Novavax <sup>*</sup> (Monovalent vaccine) Type: Protein Sub-Unit										
Age	Vaccination History	Vaccine Schedule	Administer								
12 years and older	1 or more doses of monovalent Novavax vaccine	1 dose bivalent mRNA vaccine at least 8 weeks (2 months) after Dose 2 <sup>+</sup>	Moderna: 0.50 mL/50 ug from the vial with a blue cap and gray label border. OR Pfizer-BioNTech: 0.3 mL/30 ug from the vial with a gray cap								

### **STORAGE & HANDLING**

#### **PFIZER-BIONTECH STORAGE & HANDLING INFORMATION**



AGE INDICATIONS	6 months through 4 years	5 years through 11 years	12 years and older		
FORMULATION	Bivalent	Bivalent	Bivalent		
VIAL CAP COLOR/LABEL WITH COLOR BORDER	Maroon/ Bivalent label	Orange/ Bivalent label	Gray/ Bivalent label		
PREPARATION	Dilute Before Use	Dilute Before Use	De Net Dilute		
AMOUNT OF DILUENT NEEDED PER VIAL <sup>a</sup>	2.2 mL 1.3 mL		Do Not Dilute		
DOSE VOLUME/DOSE	0.2mL/3mcg	0.2 mL/10 mcg	0.3 mL/30 mcg		
DOSES PER VIAL	10 doses (after dilution)	10 doses (after dilution)	6 doses or 1 dose		
ULT FREEZER (-90°C TO -60°C)⁵	18 months				
FREEZER (-25°C TO -15°C)	DO NOT STORE				
REFRIGERATOR (2°C TO 8°C)	10 weeks				
ROOM TEMPERATURE (8°C TO 25°C) including any thaw time	12 hours prior to first puncture				
AFTER FIRST PUNCTURE (2°C TO 25°C)	Discard after 12 hours				

 Diluent: Sterile 0.9% Sodium Chloride Injection, USP. Do not use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent.

Regardless of storage condition, vaccines should not be used after 12 months from the date of manufacture printed on the vial and cartons.

illinoisvaccinates.com



# **Preventing Errors**

- Read the label of the vial or product three times to ensure you are administering the right product/formulation.
  - More than one staff should inspect the vaccine vial for correct reconstitution, dose volume, and labeling.
- Mark the puncture time on a vial.
  - Include date and time.
  - Store properly once punctured.
  - Discard once time has passed.
- Ensure product is not expired.



# **Expiration** Dates

Contact Information	
Pfizer Customer Service	1-800-666-7248, Option 8 cvgovernment@pfizer.com
Storage and handling, administration, FAQs, Clinical Considerations, EUAs, etc.	Pfizer-BioNTech COVID-19 Vaccines   CDC
Expiration Date Look Up	https://lotexpiry.cvdvaccine.com/
Vaccine Presentations by Cap Color	Pfizer BioNTech COVID-19 Vaccine Wall Chart 06172022 (fda.gov)
Medical Information and temperature excursions	Pfizer US Medical Information 1-800-438-1985



- Thank you for your time and attention!
- Your certificate of participation will be emailed to you after you complete the survey LINKED HERE.

Click link for survey



Questions? Contact us: Diana Balbarin diana.balbarin@cityofchicago.org

Anna Esquivel anna.esquivel@cityofchicago.org



# **Thank You!**



Chicago.gov/Health



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HealthyChicago@cityofchicago.org



@ChiPublicHealth

Diana Balbarin diana.balbarin@cityofchicago.org

## Appendix A

	Vaccine	Contraindications	Precautions
	DTaP	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP or DTaP	Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized GBS <6 weeks after previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine Moderate or severe acute illness with or without fever
	Нер А	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever
	Нер В	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Hypersensitivity to yeast	Moderate or severe acute illness with or without fever
	Hib	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Age <6 weeks	Moderate or severe acute illness with or without fever
	HPV	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including yeast	Moderate or severe acute illness with or without fever
	IPV	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Pregnancy Moderate or severe acute illness with or without fever
Source:	Men ACWY	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including yeast	Moderate or severe acute illness with or without fever Preterm birth (MenACWY-CRM
	Men B	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component	Moderate or severe acute illness with or without fever Pregnancy Latex sensitivity (MenB-4c)

## Appendix A Cont.

	Vaccine	Contraindications	Precautions
	LAIV	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Concomitant use of aspirin or salicylate- containing medication in children and adolescents LAIV4 should not be administered to persons who have taken oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days. <sup>(h)</sup> Pregnancy Children aged 2 through 4 years who have received a diagnosis of asthma or whose parents or caregivers report that a health care provider has told them during the preceding 12 months that their child had wheezing or asthma or whose medical record indicates a wheezing episode has occurred during the preceding 12 months. Persons with active cerebrospinal fluid/oropharyngeal communications/leaks. Close contacts and caregivers of severely immunosuppressed persons who require a protected environment. Persons with cochlear implants (due to the potential for CSF leak, which might exist for some period of time after implantation. Providers might consider consultation with a specialist concerning risk of persistent CSF leak if an age- appropriate inactivated or recombinant vaccine cannot be used). Altered Immunocompetence Anatomic or functional asplenia (e.g. sickle cell disease)	GBS <6 weeks after a previous dose of influenza vaccine Asthma in persons aged 5 years old or older Medical conditions which might predispose to higher risk of complications attributable to influenza <sup>(9)</sup> Moderate or severe acute illness with or without fever
	MMR	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Pregnancy Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy <sup>(c)</sup> or patients with HIV infection who are severely immunocompromised) Family history of altered immunocompetence	Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product) History of thrombocytopenia or thrombocytopenic purpura Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing <sup>(I)</sup> Moderate or severe acute illness with or without fever

## Appendix A Cont.

	Vaccine	Contraindications	Precautions
*	PCV13	Severe allergic reaction (e.g., anaphylaxis) after a previous dose of PCV13 or any diphtheria-toxoid– containing vaccine or to a component of a vaccine (PCV13 or any diphtheria-toxoid–containing vaccine), including yeast	Moderate or severe acute illness with or without fever
	Rota	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component SCID History of intussusception	Altered immunocompetence other than SCID Chronic gastrointestinal disease <sup>(n)</sup> Spina bifida or bladder exstrophy <sup>(n)</sup> Moderate or severe acute illness with or without fever
	Tdap	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures), not attributable to another identifiable cause, within 7 days of administration of previous dose of DTP, DTaP, or Tdap	GBS <6 weeks after a previous dose of tetanus-toxoid-containing vaccine Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria- toxoid-containing or tetanus-toxoid-containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine Moderate or severe acute illness with or without fever
	Varicella	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component Known severe immunodeficiency (e.g., from hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long- term immunosuppressive therapy <sup>(c)</sup> or patients with HIV infection who are severely immunocompromised) <sup>(j)</sup> Pregnancy Family history of altered immunocompetence	Recent (≤11 months) receipt of antibody-containing blood product (specific interval depends on product) Moderate or severe acute illness with or without fever Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination) Use of aspirin or aspirin-containing products

### Appendix B



Medical Management of Vaccine Reactions in Children and Teens in a **Community Setting** Standing Order Source: immunize.org

#### Medical Management of Vaccine Reactions in Children and Teer in a Community Setting

The table below describes steps to take if an adverse reaction occurs after vaccination.

Administering any medicine, including vaccines, can cause an adverse reaction. Always verify container labels to ensure the correct product is being administered. To reduce the risk an adverse reaction, screen patients for vaccine contraindications and precautions before vaccination (see "Screening Checklist for Contraindications to Vaccines for Children and Teens" at www.immunize.org/catg.d/p4060.pdf).

When adverse reactions do occur, they can range from minor (e.g., soreness, itching) to serious (e.g., anaphylaxis). Be prepared.

Vaccinators should know how to recognize allergic reactions, including anaphylaxis. Have a plan and supplies ready to provide appropriate medical care if an event occurs.

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT		
Injection site	Soreness, redness, itching, or swelling	Apply a wet cloth to the injection site. Consider giving medication to reduce pain (e.g., Tylenol) or itching (e.g., Benadryl) if needed.		
	Slight bleeding	Apply pressure and an adhesive compress over the injection site.		
	Continuous bleeding	Place thick layer of gauze pads over site and maintain direct and firm pressure; raise the bleeding injection site (e.g., arm) above the level of the patient's heart.		
Psychological	Anxiety before injection	Have patient sit or lie down for the vaccination.		
fright and syncope (fainting)	Paleness, sweating, coldness of the hands and feet, nausea, light-headedness, dizziness, weakness, or visual disturbances	Have patient lie flat. Loosen any tight clothing and maintain open airway. Apply cool, damp cloth to patient's face and neck. Keep patient under close observation until full recovery.		
	Fall, without loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated.		
	Loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated. Call 911 if patient does not recover promptly.		
Anaphylaxis	Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes. Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough. Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms such as collapse, dizziness, tachycardia, hypotension.	See next page for details on treating anaphylaxis.		

#### Supply List for Managing Anaphylaxis FIRST-LINE medication

### Epinephrine 1 mg/mL aqueous solution (1:1000 concentration) in prefilled

autoinjector or various vials or ampules. At least three epinephrine doses should be available on site, dosages as appropriate for patient population.

#### OPTIONAL medications: H1 antihistamines

Diphenhydramine (e.g., Benadryl) oral, 12.5 mg/5 mL liquid; 25 or 50 mg capsules or tablets

#### Additional emergency supplies

Svringes (1 and 3 mL) and needles (22 and 25 g, 1", 1¼", 1½", and 2") if needed for epinephrine

Alcohol wipes Stethoscope

- Blood pressure measuring device (with a variety of cuff sizes as needed)
- Light with extra batteries (for examination of the mouth and throat)

A timing device, such as wristwatch, for measuring pulse

Cell phone or access to onsite phone CPR rescue mask with one-way valve

Oxygen (if available)

See also "Supplies You May Need at an Immunization Clinic\* at www.immunize.org/ catg.d/p3046.pdf.

#### REFERENCES

American Academy of Pediatrics. Red Book: 2021-2024 Report of the Committee on Infectious Diseases. 32nd edition, p. 64-67. Campbell RL, Kelso JM, Anaphylaxis: Emergency treatment, updated August 4, 2022 in UpToDate, www.uptodate.com/ contents/anaphylaxis-emergency-treatment

Kroger A, Bahta L, Long S, Sanchez P. General Best Practice Guide-lines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP) at www. cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html,

#### Emergency medical protocol for managing anaphylaxis in children and teens

- 1 If itching and swelling are limited to the injection site, observe patient closely for the development of generalized symptoms.
- 2 If symptoms are generalized, alert the lead clinical healthcare professional on-site and call 911. A healthcare professional should assess the airway, breathing, circulation, and level of consciousness of the patient. Monitor vital signs at 5-minute intervals.

3 DRUG DOSING INFORMATION: The most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.

a First-line treatment: EPINEPHRINE is the first-line treatment for anaphylaxis. Use epinephrine in a 1 mg/mL aqueous solution (1:1000 concentration). See page 3 to determine correct dose to be used based on child's weight. If using an autoinjector, administer a dose of 0.1 mg, 0.15 mg, or 0.3 mg IM (as appropriate for the patient's weight) into the anterolateral thigh. If using another epinephrine formulation, the recommended dose is 0.01 mg/kg per dose, up to a maximum single dose of 0.5 mg. Administer IM, preferably in the anterolateral thigh.

Epinephrine dose may be repeated every 5-15 minutes intervals while waiting for EMS to arrive.

b Optional treatment: H1 ANTIHISTAMINES relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction. hypotension, or shock. Consider giving diphenhydramine (e.g., Benadryl) for relief of itching or hives.

Administer diphenhydramine orally, standard dose of 1-2 mg/kg every 4-6 hours. See dosing chart on page 3.

4 Monitor the patient closely every 5 minutes. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in recumbent position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs.

5 Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medi-cation, and other relevant clinical information.

6 Notify the patient's primary care physician.

7 Report the incident to the Vaccine Adverse Event Reporting System (VAERS) at https//www.vaers.hhs.gov/reportevent.html.

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D Immunize.org

For your convenience, approximate dosages based on weight and age are provided in the following charts. Please confirm that you are administering the correct dose for your patient.



Recommended dose is 0.01 mg/kg body weight up to 0.5 mg maximum dose. May be repeated at 5-15 minute intervals up to 3 times while waiting for EMS to arrive.

First-Line Treatment: Epinephrine			ne	Epinephrine Dose		
	Age group	Range of Range of weight (lb)		1 mg/mL aqueous solution (1:1000 concentration); intramuscular. Minimum dose: 0.05 mL	Epinephrine autoinjector (0.1 mg, 0.15 mg, 0.3 mg)	
	1-6 months	9-19 lb	4-8.5 kg	0.05 mL (or mg)	off label	
Infants and children	7-36 months	20-32 lb	9-14.5 kg	0.1 mL (or mg)	0.1 mg <sup>+</sup>	
	and	37-59 months	33-39 lb	15-17.5 kg	0.15 mL (or mg)	0.15 mg/dose
	5-7 years	40-56 lb	18-25.5 kg	0.2-0.25 mL (or mg)	0.15 mg/dose	
	8-10 years	57-76 lb	26-34.5 kg	0.25-0.3 mL (or mg)	0.15 mg or 0.3 mg/dose	
Teens	11-12 years	77-99 lb	35-45 kg	0.35-0.4 mL (or mg)	0.3 mg/dose	
	13 years & older	100+ lb	4ó+ kg	0.5 mL (or mg) - max. dose	0.3 mg/dose	

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate. \* Rounded weight at the 50th percentile for each age range <sup>†</sup> 0.1 mg autoinjector is approved for use in 7.5 to 14 kg infants and children

Medical Management of Vaccine Reactions in Children and Teens in a Community Setting Standing Order Source: immunize.org

<ul> <li>commonly known as Benadryl Recommended</li> </ul>	Optional Treatment: Diphenhydramine			ramine	Diphenhydramine dose calculations based on 1 mg/kg <sup>t</sup>
		Age group	Range of weight (lb)	Range of weight (kg)*	Liquid: 12.5 mg/5 mL Capsules or tablets: 25 mg or 50 mg
	Infants and children	7-36 months	20-32 lb	9-14.5 kg	10-15 mg/dose <sup>+</sup>
dose is 1–2 mg/kg		37-59 months	33-39 lb	15-17.5 kg	15-20 mg/dose†
4-6 hrs†		5-7 years	40-56 lb	18-25.5 kg	20-25 mg/dose <sup>†</sup>
		8–12 years	57-99 lb	26-45 kg	25-50 mg/dose†
	Teens	13 years & older	100+ lb	46+ kg	50 mg/dose (up to 50 mg or 100 mg single dose) <sup>†</sup>

NOTE: If body weight is known, then dosing by weight is preferred. If weight is not known or not readily available, dosing by age is appropriate. \* Rounded weight at the 50th percentile for each age range † AAP. Red Book: 2021-2024, 32nd ed. (p. 66). Diphenhydramine maximum single dose for children younger than age 12 years is 40 mg, for children age 12 years and older, 100 mg.



### Appendix B Cont.



### Medical Management of Vaccine Reactions in Adults in a Community Setting Standing Order Source: Immunize.org

### Medical Management of Vaccine Reactions in Adults in a Community Setting

Administering any medicine, including vaccines, can cause an adverse reaction. Always verify container labels to ensure the correct product is being administered. To reduce the risk of an adverse reaction occurs after vaccination. Administerial contraindications and precautions before vaccination (see "Screening Checklist for Contraindications to Vaccines for Adults" at www.immunize.org/catg.d/p4065.pdf). When adverse reactions do occur, they can range from minor (e.g., soreness, itching) to serious (e.g., anaphylaxis). Be prepared.

Vaccinators should know how to recognize allergic reactions, including anaphylaxis. Have a plan and supplies ready to provide appropriate medical care if an event occurs.

REACTION	SIGNS AND SYMPTOMS	MANAGEMENT	
Injection site	Soreness, redness, itching, or swelling	Apply a wet cloth to the injection site. Consider giving medication to reduce pain (e.g., Tylenol) or itching (e.g., Benadryl) if needed.	
	Slight bleeding	Apply pressure and an adhesive compress over the injection site.	
	Continuous bleeding	Place thick layer of gauze pads over site and maintain direct and firm pressure. Raise the bleeding injection site (e.g., arm) above the level of the patient's heart.	
Psychological	Anxiety before injection	Have patient sit or lie down for the vaccination.	
fright, presyncope, and syncope (fainting)	Patient feels "faint" (e.g., light-headed, dizzy, weak, nauseated, or has visual disturbance)	Have patient lie flat. Loosen any tight clothing and maintain open airway. Apply cool, damp cloth to patient's face and neck. Keep patient under close observation until full recovery.	
	Fall, without loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated.	
	Loss of consciousness	Check the patient for injury before trying to move the patient. Place patient flat on back with feet elevated. Call 911 if patient does not recover promptly.	
Anaphylaxis	Skin and mucosal symptoms such as generalized hives, itching, or flushing; swelling of lips, face, throat, or eyes. Respiratory symptoms such as nasal congestion, change in voice, sensation of throat closing, stridor, shortness of breath, wheeze, or cough. Gastrointestinal symptoms such as nausea, vomiting, diarrhea, cramping abdominal pain. Cardiovascular symptoms such as collapse dizziness tachycardia hypotension	See next page for details on treating anaphylaxis.	

#### Medical Management of Vaccine Reactions in Adults in a Community Setting (continued)

#### page 2 of 2

#### Supply List for Managing Anaphylaxis

#### FIRST-LINE medication

Epinephrine 1 mg/mL aqueous solution (1:1000 concentration) in prefilled autoinjector or various vials or ampules. At least three epinephrine doses should be available onsite.

#### OPTIONAL medications: H1 antihistamines

Diphenhydramine (e.g., Benadryl) oral, 12.5 mg/5 mL liquid, 25 or 50 mg capsules or tablets

#### Additional emergency supplies

- Syringes (1 and 3 mL) and needles (22 and 25 g, 1', 1½', and 2') if needed for epinephrine
- Alcohol wipes

Stethoscope

Blood pressure measuring device (with a variety of cuff sizes as needed)

 Light with extra batteries (for examination of the mouth and throat)

 A timing device, such as wristwatch, for measuring pulse

Cell phone or access to onsite phone

CPR rescue mask with one-way valve

Oxygen (if available)

See also "Supplies You May Need at an Immunization Clinic" at www.immunize.org/ catg.d/p3046.pdf.

#### REFERENCES

Campbell RL, Kelso JM, Anaphylaxis: Emergency treatment, updated August 4, 2022 in UpToDate, www.uptodate.com/contents/anaphylaxis-emergency-treatment

Kroger A, Bahta L, Long S, Sanchez P. General Best Practice Guidelines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP) at www.cdc.gov/vaccines/hcp/aciprecs/general-recs/index.html. Emergency medical protocol for managing anaphylaxis in adults

- If itching and swelling are limited to the injection site, observe patient closely for the development of generalized symptoms.
- 2 If symptoms are generalized, alert the lead clinical healthcare professional on-site and call 911. A healthcare professional should assess the airway, breathing, circulation, and level of consciousness of the patient. Monitor vital signs at 5-minute intervals.
- 3 DOSING INFORMATION: The most important therapy in anaphylaxis is epinephrine. There are NO absolute contraindications to epinephrine in the setting of anaphylaxis.
- a First-line treatment: **EPINEPHRINE** is the first-line treatment for anaphylaxis. Use epinephrine in a 1 mg/mL aqueous solution (1:1000 concentration). Administer a 0.3 mg dose IM using an autoinjector in the mid-outer thigh. If using another epinephrine formulation, the recommended dose is 0.01 mg/kg, ranging for adults from 0.3 mg to maximum dose of 0.5 mg. Administer IM, preferably in the mid-outer thigh.

Epinephrine doses may be repeated 2 additional times at 5–15 minute intervals while waiting for EMS to arrive.

- b Optional treatment: H<sub>1</sub> ANTIHISTAMINES relieve itching and urticaria (hives). These medications DO NOT relieve upper or lower airway obstruction, hypotension, or shock. Consider giving diphenhydramine (e.g., Benadryl) for relief of itching and hives. Administer orally 1-2 mg/kg every 4-6 hours, up to a maximum single dose of 100 mg.
- 4 Monitor blood pressure and pulse every 5 minutes. Perform cardiopulmonary resuscitation (CPR), if necessary, and maintain airway. Keep patient in recumbent position (flat on back) unless he or she is having breathing difficulty. If breathing is difficult, patient's head may be elevated, provided blood pressure is adequate to prevent loss of consciousness. If blood pressure is low, elevate legs.
- 5 Record the patient's reaction (e.g., hives, anaphylaxis) to the vaccine, all vital signs, medications administered to the patient, including the time, dosage, response, and the name of the medical personnel who administered the medication, and other relevant clinical information.

6 Notify the patient's primary care physician.

7 Report the incident to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov/reportevent.html.



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FOR PROFESSIONALS www.immunize.org / FOR THE PUBLIC www.vaccineinformation.org





# Appendix C

### **CDPH iPad Error Reporting Form**

	iPad Error Rep	orting Form		
First & Last Name:				
Email:				
Phone:				
Preferred contact method (a	at least 1): 🗆 Email	🗆 Phone		
Date of Error:/	_/	Today's Date:	_/	/
iPad Asset Tag:				
Type of Error (check all the	at apply):			
Single Sign-On Error	🗆 No Internet Conn	lection		
□ Login but just spins	□ Other:			
Brief description of error:				

Chicago Department of Public Health

Reported to Immunizations for follow up? 

YES NO

Displayed Error Message:

Take a picture and send completed form to <u>getvaxchi@cityofchicago.org</u> along with any screenshots of errors. Please reach out with any questions.